

FILE COPY



KEN SCHULTZ
MAYOR

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

November 21, 1989

Harold L. Bennett
Clint Sherril & Associates
729 San Mateo Boulevard, NE
Albuquerque, New Mexico 87110

RE: GRADING/PAVING PLAN FOR CENTRAL COMPOUND
(K-15/D51) REPORT AND PLAN SUBMITTED ON NOVEMBER 16, 1989

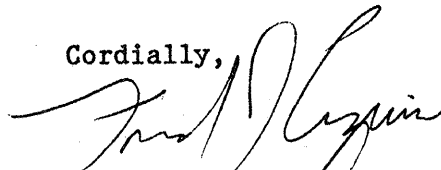
Dear Mr. Bennett:

Based on the information provided on your resubmittal of November 16, 1989, the referenced drainage plan is approved for Grading/Paving Permit.

Please advise your client that upon completion of the proposed construction, a field inspection must be requested.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,


for Bernie J. Montoya, C.E.
Engineering Assistant

BJM/bsj
(WP+1460)

PUBLIC WORKS DEPARTMENT

Walter H. Nickerson, Jr., P.E.
Assistant Director Public Works

ENGINEERING GROUP

Telephone (505) 768-2500

AN EQUAL OPPORTUNITY EMPLOYER

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Central Compound ZONE ATLAS/DRNG. FILE #: _____

LEGAL DESCRIPTION: Lot 5 BLOCK 53 Terrace Addition

CITY ADDRESS: _____

ENGINEERING FIRM: Clint Sherrill & Assoc. CONTACT: _____

ADDRESS: 729 San Mateo NE PHONE: 256 7364

OWNER: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: Clint Sherrill & Assoc. CONTACT: _____

ADDRESS: 729 San Mateo NE PHONE: 256 7364

CONTRACTOR: _____ CONTACT: _____

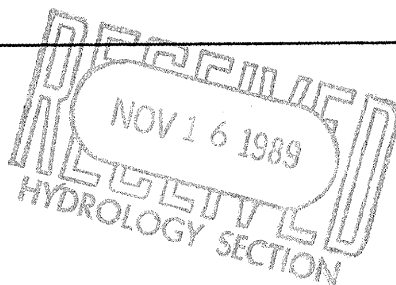
ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☐ YES

☐ NO

☐ COPY OF CONFERENCE RECAP
SHEET PROVIDED



DRB NO. _____

EPC NO. _____

PROJ. NO. _____

TYPE OF SUBMITTAL:

☒ DRAINAGE REPORT

☒ DRAINAGE PLAN

☐ CONCEPTUAL GRADING & DRAINAGE PLAN

☐ GRADING PLAN

☐ EROSION CONTROL PLAN

☐ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

☐ SKETCH PLAT APPROVAL

☐ PRELIMINARY PLAT APPROVAL

☐ SITE DEVELOPMENT PLAN APPROVAL

☐ FINAL PLAT APPROVAL

☐ BUILDING PERMIT APPROVAL

☐ FOUNDATION PERMIT APPROVAL

☐ CERTIFICATE OF OCCUPANCY APPROVAL

☐ ROUGH GRADING PERMIT APPROVAL

☒ GRADING/PAVING PERMIT APPROVAL

☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: 11-16-89

BY: Harold J. Burns

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Central Compound ZONE ATLAS/DRNG. FILE #: K-15-1245

LEGAL DESCRIPTION: Lot 5 and S 1/2 Lot 6 B153 Terrace Addition

CITY ADDRESS: _____

ENGINEERING FIRM: Clint Sherrill & Asso CONTACT: HAROLD L BENNETT PE

ADDRESS: 729 San Mateo NE PHONE: 505/256-7364

OWNER: Lazar Co. CONTACT: _____

ADDRESS: PO Box 6620 Albuquerque NM 87197 PHONE: 505/243-4400

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: Clint Sherrill & Asso. CONTACT: _____

ADDRESS: 729 San Mateo NE PHONE: 505/256-7364

CONTRACTOR: _____ CONTACT: _____

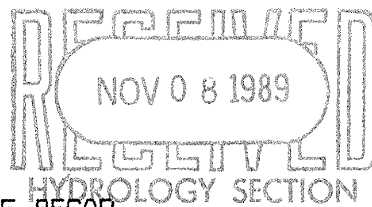
ADDRESS: _____ PHONE: _____

PRE-DESIGN MEETING:

☐ YES

☐ NO

☐ COPY OF CONFERENCE RECAP SHEET PROVIDED



DRB NO. _____

EPC NO. _____

PROJ. NO. _____

TYPE OF SUBMITTAL:

☒ DRAINAGE REPORT

☒ DRAINAGE PLAN

☒ CONCEPTUAL GRADING & DRAINAGE PLAN

☒ GRADING PLAN

☒ EROSION CONTROL PLAN

☒ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

☐ SKETCH PLAT APPROVAL

☐ PRELIMINARY PLAT APPROVAL

☐ SITE DEVELOPMENT PLAN APPROVAL

☐ FINAL PLAT APPROVAL

☐ BUILDING PERMIT APPROVAL

☐ FOUNDATION PERMIT APPROVAL

☐ CERTIFICATE OF OCCUPANCY APPROVAL

☐ ROUGH GRADING PERMIT APPROVAL

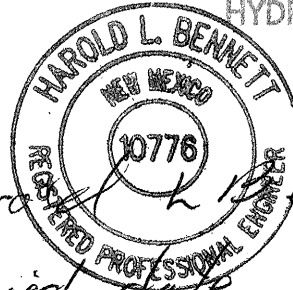
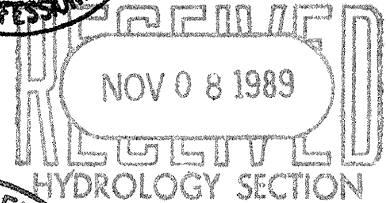
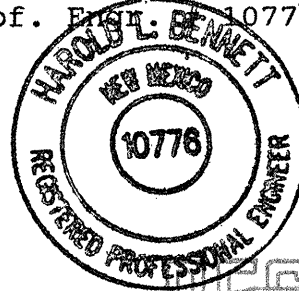
☒ GRADING/PAVING PERMIT APPROVAL

☐ OTHER _____ (SPECIFY)

DATE SUBMITTED: _____

I Harold L. Bennett P.E. Certify that the document and drawings were prepared under my supervision and are correct to the best of my knowledge and belief.

Harold L. Bennett 11-3-89
NM Prof. Eng. 10776 Date



Harold L. Bennett
revised date 11-16-89

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

CONFERENCE RECAP

DRAINAGE FILE/ZONE ATLAS PAGE NO.: K-15 DATE: 8/31/89 @ 1030
PLANNING DIVISION NOS: EPC: _____ DRB: _____
SUBJECT: 1602 Central, SE
STREET ADDRESS (IF KNOWN): 1602 Central Ave, SE
SUBDIVISION NAME: Lot 5 of Block 53 Terrace Addition

APPROVAL REQUESTED:

_____ PRELIMINARY PLAT	_____ FINAL PLAT
_____ SITE DEVELOPMENT PLAN	_____ BUILDING PERMIT
<u>X</u> OTHER <u>grading/paving</u>	_____ ROUGH GRADING

WHO	REPRESENTING
ATTENDANCE: <u>Harold Bennett PE.</u>	_____
<u>Clint Sherrill</u>	<u>Clint Sherrill & Assoc.</u>
<u>Bernie Montoya</u>	<u>Hydrology Section</u>

FINDINGS:

1. Approved grade/paving plan per D.P.M. guidelines required prior to any construction.
2. If proposed parking lot drains towards existing alley, alley must be paved or improvements coordinated through D.R.C. must be implemented.
3. Alley capacity must be computed as it exists.
4. Existing catch basin exist on Central West of Ash.
5. Free discharge into Central or the alley.

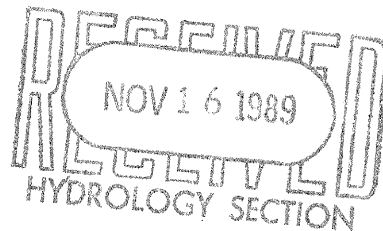
The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED: <u>Harold Bennett</u>	SIGNED: <u>Bernie Montoya</u>
TITLE: <u>Professional Engineer</u>	TITLE: <u>Engineering Assistant</u>
DATE: <u>8/31/89</u>	DATE: <u>8/31/89</u>

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL

Letters Directly

DRAINAGE REPORT
FOR
CENTRAL COMPOUND
LOT 5 BLOCK 53, THE TERRACE ADDITION
CITY OF ALBUQUERQUE, NM



By
Harold L. Bennett P.E.
Clint Sherrill & Associates
729 San Mateo NE
Albuquerque, NM 87108
(505)256-7364

November 3, 1989

PROPERTY OF CENTRAL COMPOUND
LOT 5 & SOUTHERLY ONE-HALF OF LOT 6 BLOCK 53
THE TERRACE ADDITION
ALBUQUERQUE, NEW MEXICO

1. General. The proposal is to change land use of the subject property located on the two lots east of the corner of Ash and Central Streets in SW Albuquerque, New Mexico. The owner wishes to clear Lot 5, grade it to contours, and cover it with a Bituminous Surface overlay. The Lot 5 will then be usable as a parking area to serve the abutting commercial buildings located east of the lots. The southerly one-half of Lot 6 is presently covered with Bituminous Concrete and has been leased by the owners. The southerly one-half of Lot 6 will also be used as parking for commercial building users. Traffic will flow from Central Street south and exit at a present driveway on the west side of Lot 6.

2. Topography and Soils. The major Soil of the subdivision is Cu (Cut and Fill land). The unified soil classification is unclassified. The site slopes to the south at approximately 1.5 percent. Cu-land fill consists of sandy loam and very gravelly sand that has been mixed by filling for residential, industrial, and business developments. It is on a very high terrace breaks of the Rio Grande Valley. Run off is slow to very rapid, and the hazard to erosion is slight to severe.

3. Development. The proposed 0.17 acres of Lot 5 is to be regraded to provide for all runoff to be to the south into a asphalt paved alley. The lot will be surfaced with Bituminous Asphalt Concrete with parking blocks and landscaped with trees in planters. The adjoining south one-half of Lot 6 will be joined and its drainage will continue to be drained east into Ash Street thru the present curb cut.

4. Existing Storm Drain Facilities. Lot 5 is fronted on the south with a 16' asphalt concrete surface alley way. which slopes to the west into Ash Street. Ash Street is a 33 curb and gutter street with asphalt surface with slopes to the north into Central Avenue. There is a storm water drain on the SW corner of the intersection of Central and Ash. Runoff from Lot 5 presently flows into the alley and then into Ash Street. Finally, it flows into the storm drain at Central and Ash. The revised Drainage plan will not change the existing drainage paths.

5. Drainage Analysis. The lots are located on the south side of Central Avenue. The lot 5 is fronted on the east and west by commercial buildings. All run off from lot 5 originates on lot 5 and flows south into the bituminous surfaced alley. The alleyway is constructed as an invented "V" from the east lot line into Ash Street. The alley has a 1' concrete apron along each side which prevents edge erosion and maintains stability of the bituminous surface. It is calculated that the $Q_{100} = .35$ cfs runoff will not

effect the ally capacity which is calculated to be adequately provided for a Q of 209 cfs.

6. Recommendations. Lot 5 shall be graded and surfaced into a "V" to provide for positive runoff and prevent erosion of the existing Cu soil. Planting will be installed. Upon construction of an entrance, adequate handy-cap parking will be provided. The new west side entrance is yet to be designed.

HYDROLOGY COMPUTATIONS

Water Shed Lot 5 only

Water shed area	A	0.163	acres
Length of water course	L	142.	feet
Elevator difference	H	3,000.	feet
Average slope	S	.0225	
Slope to one-half power		0.1501	
Time of concentration			
Ta=		6	min.

Soil symbol	Cu		
Soil name		Cut and Fill	
Land use		Paved Parking Lot	
Average Percent impervious		9.8	%
100 yr/6hr. rainfall Rate		2.3	in.
10 yr/6hr. rainfall Rate			
2.3 X .657		1.51	in.
"C" factor		.95	in.
Rainfall intensity			
I ₁₀ = 6.84 (1.51)(10) ^{-.51}		3.19	in.
I ₁₀₀ = 6.84 (2.3) (10) ^{-.51}		4.86	in.
Q-CUA			
Q ₁₀ = (.95)(3.19)(.163) =		.4942	cfs
Q ₁₀₀ = (.95)(4.86)(.163) =		.7526	cfs

Alley Calculations for Capacity

16' wide (one-way east-bound traffic)
 channel is 0.15' deep with mounding on each side.

The alley slopes 2.5% to the west.

$$Q_{\text{capacity}} = 16 \times .15 \times \frac{1.486}{.017} \times .1472^{2/3} \times .025^{1/2} = 9.25 \text{ cfs}$$

